GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Diploma in Vocation (D.Voc), 2nd Semester

Branch: All Branches

Subject Name: Basic Electronics Lab

Subject Code: 1220106

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				
				Theory		Tutorial / Practical		Total Marks
L	T	OJT	C	University exams (ESE)	Progressive Assessment (PA)	External Practical /viva Exam(ESE)	Internal evaluation Practical /viva Exam(PA)	
-	-	2	1	-	-	30	20	50

Course Content:

Suggested Course Practical List: If any

Sr. No.	Experiment /Practical Exercises	Hrs.
1	Study basic operations on Multi SIM/ Electronic Workbench	02
2	Measure voltage and current of a given circuit using analog and digital multi meters.	02
3	Study the performance of P-N junction diode	02
4	Study the performance of zener diode	02
5	Measure voltage and frequency of any given signal using oscilloscope.	02
6	Study performance of bridge rectifier	02
7	Study parameters of various signals	02
8	Study performance of transistor as a switch	02
9	Study the performance of the T-filter	02
10	Study the performance of the π-filter	02
11	Study various cables for different applications	02
12	Study various connectors & Draw their diagram	02

Note: Minimum Eight Experiments should be performed by the students from the above given list. Or any other experiments related to above topics.

References/Suggested Learning Resources:

(a) Books:

Sr. No.	Title of Books	Author	Publication
1	Principle of Electronics	V.K.Mehta	S.Chand & Co., latest edition
2	Electronics Principles	Albert Paul Malvino	McGraw Hill, latest edition
3	Electronics Devices and Circuit Theory	Robert L. Boylestad	Pearson, latest edition
4	Electronic Instrumentation	H.S.Kalsi	McGraw Hill, latest edition
5	Cables and Connectors	John Kadick	AVO International, latest edition

(b) Open source software and website:

1. https://nptel.ac.in/

List of Laboratory/Learning Resources Required: CRO, Function Generators, DC power supply, bread board and discrete electronic components.